

Exercise Science EXS 02B2 / MBK 2B01 / MBK 2B02 / HMS 1BA2 / HMS 2BB2

**NOVEMBER EXAMINATION**

**PROGRAMME** : HUMAN MOVEMENT STUDIES

**MODULE NAME** : EXERCISE SCIENCE 2B

**MODULE CODE** : EXS 02B2 / MBK 2B01 / MBK 2B02 / HMS 1BA2 / HMS 2BB2

**DATE** : 05 DECEMBER 2016

**DURATION** : TWO (2) HOURS

**TOTAL MARKS** : 100 MARKS

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**EXAMINER** : MR A.J.J. LOMBARD

**MODERATOR** : PROF Y. COOPOO

**NUMBER OF PAGES** : THREE (3) PAGES

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**INSTRUCTIONS TO CANDIDATES:****MAKE SURE THAT YOU HAVE THE COMPLETE PAPER.****ANSWER ALL THE QUESTIONS.****SECTION A: CARDIORESPIRATORY EXERCISE SCIENCE****SECTION B: PERIODIZATION**

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## **SECTION A: CARDIORESPIRATORY EXERCISE SCIENCE (50 MARKS)**

### **QUESTION 1**

Describe the response of the major cardiovascular variables during long-term, moderate to heavy sub maximal aerobic exercise. (16 X ½ = 8)

### **QUESTION 2**

Discuss the similarities and differences between the sexes in the cardiovascular response to the various classifications of exercise i.e. submaximal exercise to maximum. (16 X ½ = 8)

### **QUESTION 3**

Explain why the magnitude of cardiovascular response is mainly influenced by the intensity of muscular contraction. (6)

### **QUESTION 4**

Explain the possible advantages of a warm up and cool down to an athlete. (5)

### **QUESTION 5**

Describe the response of external respiration on short term, light to moderate submaximal aerobic exercise. (10)

### **QUESTION 6**

Discuss male and female respiratory differences during rest and activity. (10)

### **QUESTION 7**

Name any three (3) pulmonary adaptations as a result of training. (3)  
**[50]**

## **SECTION B: PERIODIZATION (50 MARKS)**

### **QUESTION 1**

Describe the dominant motor or bio motor abilities playing a role in sport performance. (6)

### **QUESTION 2**

Briefly discuss any four (4) of the six (6) intensity training zones as proposed by Bompa and Carrera (2005). (8)

### **QUESTION 3**

Name and discuss common misconceptions of strength training for endurance sports. (10)

**QUESTION 4**

Discuss your approach to the order of exercises, number of repetitions and sets, as well as the rest intervals to be considered when designing a resistance training programme. (14)

**QUESTION 5**

Name the six (6) phases of strength periodization. (6)

**QUESTION 6**

Discuss the training session plan as the main tool for organizing a daily workout plan. (6)  
**[50]**

**TOTAL: 100 MARKS**